



AIR POLLUTION CONTROL DISTRICT
LOUISVILLE, KENTUCKY

GREG FISCHER
MAYOR

LAUREN ANDERSON, DIRECTOR

August 2, 2011

Industrial Container Services - KY, LLC
Mr. Dan Wheeler
405 Industry Rd.
Louisville, KY 40208

Dear Mr. Wheeler:

Enclosed is the approved Title V renewed permit P-137-97-TV (R1) and accompanying Statement of Basis (SoB) issued by the Louisville Metro air Pollution District. This permit includes both general and specific conditions. Compliance with these permit conditions help maintain a healthy environment for the citizens of Louisville.

The District encourages facilities to investigate pollution prevention. These efforts can save you money, while reducing pollution and energy consumption. For more guidance on identifying opportunities for waste reduction and energy efficiency, please contact the Kentucky Pollution Prevention Center at (502) 852-0965.

Please do not hesitate to contact the Permit Engineer identified on the permit at (502) 574-6000 if you have any questions regarding the permit or permit conditions.

Sincerely,

Paul G. Aud, P.E.
Engineer Manager

Enclosures: Permit: Title V Operating Permit: P-137-97-TV (R1)
Title V Permit Statement of Basis (SoB)

PA: mk



**LOUISVILLE METRO
AIR POLLUTION CONTROL DISTRICT
850 Barret Ave., Louisville, Kentucky 40204**

Title V Operating Permit

Permit No: 139-97-TV (R1)

Plant ID: 0002

Effective Date: 09/2/2011

Expiration Date: 09/2/2016

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

**Industrial Container Services - KY, LLC
405 Industry Road
Louisville, Kentucky 40208-1692**

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Permit Writer: Shannon Clemons Hosey

Public Notice Date: 04/01/2011

Proposed Permit Date: 06/14/2011


Air Pollution Control Officer

Table of Contents

Title V Permit Revisions/Changes	3
Abbreviations and Acronyms	4
Preamble	4
General Conditions	6
Emission Unit U1: One (1) Drum Reclamation Furnace with an afterburner	16
U1 Applicable Regulations	16
U1 Emission Points	16
U1 Control Devices	16
U1 Specific Conditions	17
U1 Comments	21
Emission Unit U2: One (1) Surface Coating Operation	23
U2 Applicable Regulations	23
U2 Emission Points	24
U2 Control Devices	24
U2 Specific Conditions	25
U2 Comments	41
Emission Unit U3: One (1) Surface Coating Operation	42
U3 Applicable Regulations	42
U3 Emission Points	43
U3 Control Devices	43
U3 Specific Conditions	44
U3 Comments	59
Emission Unit U4: One (1) Natural Gas Fired Boiler	61
U4 Applicable Regulations	61
U4 Emission Points	61
U4 Control Devices	61
U4 Specific Conditions	62
U4 Comments	63
Emission Unit U5: Five (5) Abrasive Blast Cleaning Units	64
U5 Applicable Regulations	64
U5 Emission Points	65
U5 Control Devices	65
U5 Specific Conditions	66
U5 Comments	71
Emission Unit U6: One (1) Drum Flushing Operation	73
U6 Applicable Regulations	73
U6 Emission Points	73
U6 Control Devices	73
U6 Specific Conditions	74
U6 Comments	74
Alternative Operating Scenario	75
Insignificant Activities	75
Compliance Assurance Monitoring (CAM) Plan	77

Title V Permit Revisions/Changes

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./Page No.	Description
N/A	1/24/2001	04/23/2000	Initial	Entire Permit	Initial Permit Issuance
R1	08/02/2011	04/01/2011	Renewal	Entire Permit	5 year Renewal; Incorporate Construction Permits 121-03, 348-05, 82-06, 446-08, 447-08, 259-09-C; Change of Address; and Ownership/Name Change

Title V Permit Revision Applications

Application Number	Date Received	Type
10448	07/22/2005	Title V Renewal
10798	12/31/2007	Ownership Change
11275	04/09/2009	112(j) Part 1
11396	09/04/2009	112(j) Part 2
11418	09/30/2009	Change of Address
11634	06/30/2010	TV Revision (Construction Permits 446/447-08-C)
11760	01/31/2011	TV Revision (Construction Permit 259-09-C)

Abbreviations and Acronyms

AFS	-	Airs Facility Subsystem
AIRS	-	Aerometric Information Retrieval System
APCD	-	Air Pollution Control District
ASL	-	Adjusted Significant Level
atm	-	Atmosphere
BACT	-	Best Available Control Technology
Btu	-	British Thermal Unit
CEMS	-	Continuous Emission Monitoring System
CAAA-	-	Clean Air Act Amendments (15 November 1990)
HAP	-	Hazardous Air Pollutant
hr	-	hour
lbs	-	Pounds
l	-	Liter
MACT	-	Maximum Achievable Control Technology
m	-	Meter
mg	-	Milligram
mm	-	Millimeter
MM	-	Million
MOCS	-	Management of Change System
NAICS	-	North American Industry Classification System
NSR	-	New Source Review
NO _x	-	Nitrogen oxides
NSPS	-	New Source Performance Standards
PM	-	Particulate Matter
PM ₁₀	-	Particulate matter less than 10 microns
ppm	-	Parts per million
PSD	-	Prevention of Significant Deterioration
PMP	-	Preventive Maintenance Plan
psia	-	Pounds per square inch absolute
RACT	-	Reasonably Available Control Technology
SC	-	Specific Condition
SIC	-	Standard Industrial Classification
SIP	-	State Implementation Plan
SO ₂	-	Sulfur dioxide
TAC	-	Toxic Air Contaminant
TAL	-	Threshold Ambient Limit
tpy	-	Tons per year
UTM	-	Universal Transverse Mercator
VOC	-	Volatile Organic Compound

Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.22, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 2.02, Section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 2.02, Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

***US EPA - Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960***

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.
5. **Emergency Provision**
 - a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
 - ii. The permitted facility was at the time being properly operated.
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
 - b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
 - c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)
6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.
8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)
9. **Enforcement Action Defense**
 - a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)
10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6)

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
12. **Insignificant Activities** - The owner or operator shall:
 - a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
 - b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
- Enter the premises to inspect any emissions-related activity or records required in this permit.
 - Have access to and copy records required by this permit.
 - Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
 - Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)
14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. All semi-annual compliance reports shall include the following certification statement per Regulation 2.16.
- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete”.
 - Signature and title of company responsible official.

If a change in the “Responsible Official” (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form 9400-A and Form AP-0208) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period
January 1 through June 30
July 1 through December 31

Report Due Date
August 29th
March 1st

Note:

¹ The date for leap years is February 29.

15. **Off-permit Documents**- Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)
16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.

23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:
- a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
 - c. Knowingly making any false statement in any permit application.
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.

31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
35. **Submittal of Reports, Data, Notifications, and Applications**

- a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

***Louisville Metro Air Pollution Control District
850 Barret Ave
Louisville, KY 40204-1745***

- b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

***US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104***

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Provisions
1.02	Definitions
1.03	Abbreviations And Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring and Reporting
1.07	Emissions During Shutdowns, Malfunctions, Startups, and Emergencies
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Minor Facility Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

District Only Enforceable:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.01	Standards for Toxic Air Contaminants and Hazardous air Pollutants
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;
- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166.
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service,

maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40CFR 82 Subpart A, Production and Consumption Controls. (Regulation 2.16, section 4.1.5)

Emission Unit U1: One (1) Drum Reclamation Furnace rated at 10 MMBtu/hr with an afterburner rated at 12 MMBtu/hr integrated with a waste heat recovery boiler rated at 11.7 MMBtu/hr.

U1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3, & 4
7.25	Standards of Performance for New sources Using Volatile Organic compounds	1, 2, 3, 4, & 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.01	General Provisions	1, 2, 3, & 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4, 5, & 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1, 2, 3, 4, & 5
5.23	Categories of Toxic Air Contaminants	1, 2, 3, 4, 5, & 6

U1 Emission Points					
Emission Point	Description	Applicable Regulation(s)	Allowable Emission/Equipment Standard	Control Device	Stack ID
E1	One (1) Drum Reclamation Furnace	7.25	See Specific Conditions	Oxidizer/Afterburner C1	S1
		7.08	PM: 2.34 lb/hr NO _x : 300 ppmv Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		

U1 Control Devices:

Control ID	Description	Performance Indicator	Stack ID
C1	One (1) Oxidizer/Afterburner with 24,358 acfm	Combustion Chamber Temperature: $\geq 1,000^{\circ}\text{F}$ Afterburner Temperature: $\geq 1,500^{\circ}\text{F}$	S1

U1 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

- i. The owner or operator shall not process more than 300 drums per hour during each operating day and allow or cause the VOC emissions to exceed 5 tons per year, unless modeling or a Best Available Control Technology (BACT) analysis has been submitted to, and approved by, the District. (Regulation 7.25, sections 2 and 3)(BACT)(See Comment 1)
- ii. The owner or operator shall ensure the furnace combustion zone temperature must be at a minimum 1000°F and the oxidizer/afterburner temperature must be at a minimum 1500°F. These temperatures are subject to change upon stack testing.
- iii. The control device must be used at all times. (Regulation 7.25)

b. PM/PM₁₀

The owner or operator shall not allow or cause the PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 2)

c. Opacity

The owner or operator shall not allow or cause visible emissions to equal or exceed twenty percent (20%) opacity. (Regulation 7.08, section 3.1.1)

d. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulations 5.01 and 5.21) (See Comment 4)

e. NO_x

The owner or operator shall not allow or cause the NO_x emissions to exceed 300 ppmv, expressed as NO₂. (Regulation 7.08, section 3.1.2) (See Comment 3)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal.

a. VOC

- i. The owner or operator shall maintain daily records that identify all periods of bypassing the oxidizer/afterburner while the drum reclamation furnace was in operation or a declaration entered into the records that the oxidizer/afterburner operated at all times the drum reclamation furnace was in operation for a given day. The records shall include the date, duration (including start and stop time) of each bypass event, the total emissions of VOC during each bypass event, summary information on the cause or reason for bypassing the oxidizer/afterburner, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the oxidizer/afterburner.
- ii. The owner or operator shall operate and maintain a temperature monitoring device equipped with a continuous recorder to monitor and record the temperature of the furnace combustion zone to ensure a minimum temperature of 1000°F and a minimum temperature of 1500°F for the oxidizer/afterburner. The monitoring device shall be maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's specifications and recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the drum reclamation furnace is in use.
- iii. The owner or operator shall track the number of drums and the hours of operation daily.

b. **PM/PM₁₀**

There are no compliance monitoring and record keeping requirements for PM for Emission Unit U1. (See Comment 2)

c. **Opacity**

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible

emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

d. **TAC**

- i. The owner or operator shall maintain daily records of the emissions of all TACs using an Emissions Tracking Program (e.g. "Air Trace" or equivalent).
- ii. The owner or operator shall maintain onsite, records of calculations of the pound per hour (lb/hr) and the pound per averaging period for each TAC emission to verify that the TACs are de minimis. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulation 5.01, section 3)

e. **NO_x**

There are no compliance monitoring and record keeping requirements for NO_x for Emission Unit U1. (See Comment 3)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

- i. Identification of all periods of bypassing the oxidizer/afterburner when the drum reclamation furnace was in operation during a reporting period. The semi-annual compliance report shall include the date, duration (including start and stop time) of each bypass event, the total VOC emissions during each bypass event, summary information on the cause or reason for each bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the oxidizer/afterburner. If there were no periods of bypassing the oxidizer/afterburner during a reporting period, the semi-annual compliance report must include a statement that there were no periods of bypassing the oxidizer/afterburner during the reporting period.
- ii. Identification of all periods of excursion during a reporting period. Excursion is defined as operating outside the established performance indicator range for the furnace combustion chamber temperature and the oxidizer/afterburner temperature. The semi-annual compliance report must include the date, duration (including the start and stop time), summary information on the cause or reason for each occurrence of operating outside the established minimum temperatures for the combustion

chamber and afterburner, corrective action taken to correct the deviation and returning the operating parameters to the established minimum temperatures, and measures implemented to prevent reoccurrence of the situation that resulted in operating below the established minimum temperature values. If there were no excursions during a reporting period, the semi-annual compliance report must include a statement that there were no periods of excursions during the reporting period.

- iii. Identification of all periods of an exceedance of the number of drums processed per hour during a reporting period. If there were no exceedances during a reporting period, the semi-annual compliance report must include a statement that there were no periods of exceedances during the reporting period.

b. **PM/PM₁₀**

There are no semi-annual compliance reporting requirements for PM for Emission Unit U1.

c. **Opacity**

- i. Any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests.
- ii. Any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed.
- iii. The number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed.
- iv. Identification of all periods of exceeding the opacity standard.
- v. Description of any corrective action taken for each exceedance of an opacity standard.

d. **TAC**

The owner or operator shall report semiannual to the District all periods of introducing process feed that caused any de minimis emission level to be exceeded by any Category 1 through 4 TAC during a reporting period. The semiannual compliance report shall include the date, type and amount of residue, and total TAC emissions resulting from each residue that caused the exceedance of any de minimis value. If there were no periods of exceeding any TAC de minimis emission levels, the semiannual compliance report must include a statement that there were no exceedences of any TAC de minimis emission levels. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded.

e. **NO_x**

There are no semiannual compliance reporting requirements for NO_x for Emission Unit U1.

S4. **Testing** (Regulation 2.16, section 4.1.9.3)a. **PM/PM₁₀**

There are no compliance testing requirements for this equipment.

b. **Opacity**

There are no compliance testing requirements for this equipment.

c. **NO_x**

There are no compliance testing requirements for this equipment.

d. **VOC**

There are no compliance testing requirements for this equipment.

e. **TAC**

There are no compliance testing requirements for this equipment.

U1 Comments

1. Industrial Container Services - KY, LLC conducted stack testing in May 2005 using Method 25A to determine the VOC destruction efficiency of the oxidizer/afterburner. The oxidizer/afterburner achieved a destruction efficiency of 99.4% (average of three 1-hr test runs) at a production rate of 300 drums per hour which the District has deemed BACT level of control for VOC for the drum reclamation furnace. The pre-control VOC emissions were 19.27 tons per year; therefore, 40 CFR Part 64 (CAM) does not apply to the drum reclamation furnace.
2. Industrial Container Services - KY, LLC conducted stack testing in May 2005 using Method 5 to determine the PM emissions from the drum reclamation furnace. Based on the average of three 1-hr test runs, the PM emission rate was 1.63 lb/hr at a production rate of 300 drums per hour which is below the applicable PM emission standard of 2.34 lb/hr.
3. Industrial Container Services - KY, LLC conducted stack testing in May 2005 using Method 7E to determine the NO_x emissions from the drum reclamation furnace. Based on the average of three 1-hr test runs, the NO_x emission rate was 60.1 ppmv at a production rate of 300 drums per hour which is below the applicable NO_x emission standard of 300 ppmv, expressed as NO₂.

4. The following form may be used for determining BAC and De minimus values:

http://www.louisvilleky.gov/NR/rdonlyres/121AAADA-9838-4057-ADFC-88CD95A14937/0/BAC_Worksheet.pdf

5. Industrial Container Services requested to have emissions below de minimis for all TACs.
6. Construction permit 259-09-C is being incorporated in the TV renewal permit.

Emission Unit U2: Miscellaneous metal parts surface coating operation. 55 gallon and 30 gallon steel drums including four drying ovens.

U2 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.09	Standards of Performance for Existing Process Operations	1, 2, 3, & 5
7.08	Standards of Performance for New Process Operations	1, 2, & 3
6.31	Standards of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating	1, 2, 3, 4, 5, 6, & 7
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating	1, 2, 3, 4, 5, 6, & 7
40 CFR Part 63, Subpart A	General Provisions	63.1 through 63.16
40 CFR Part 63, Subpart MMM	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	63.3880, 63.3881(a), 63.3882, 63.3890(b)(1), 63.3891(b), 63.3893(a), 63.3900(a)(1), 63.3901, 63.3910, 63.3920, 63.3930, 63.3931, 63.3950, 63.3951, 63.3952, 63.3980, 63.3981

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.01	General Provisions	1, 2, 3, & 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4, 5, & 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1, 2, 3, 4, & 5
5.23	Categories of Toxic Air Contaminants	1, 2, 3, 4, 5, & 6

U2 Emission Points					
Emission Point	Description	Applicable Regulation(s)	Allowable Emission/Equipment Standard	Control Device	Stack ID
E2	One (1) Paint Booth (55 and 30 gallon drums) Custom Built. June 1, 1973	6.31	3.5 lb VOC/gal	C2	S2
		6.09	PM: 2.58 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart Mmmm	See Specific Conditions		
E5	One (1) Paint Booth (OH Drum Lining #1) Custom Built. July 2, 1992	7.59	3.5 lb VOC/gal	C5	S5
		7.08	PM: 2.34 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart Mmmm	See Specific Conditions		
E6	One (1) Paint Booth (OH Drum Lining #2) Custom Built. July 2, 1992	7.59	3.5 lb VOC/gal	C6	S6
		7.08	PM: 2.34 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart Mmmm	See Specific Conditions		
E9	One (1) Paint Booth Open Head Nov 9, 1979	6.31	3.5 lb VOC/gal	C9	S9
		6.09	PM: 2.58 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart Mmmm	See Specific Conditions		
E10	One (1) Paint Booth Drum Lid Nov 30, 1986	7.59	3.5 lb VOC/gal	C10	S10
		7.08	PM: 2.34 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart Mmmm	See Specific Conditions		

U2 Control Devices: Control devices C2, C5, C6, C9, and C10 are washable stainless steel filter panels to control PM emissions.

U2 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

The owner or operator shall not allow or cause the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of the following:

- i. 4.3 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for clear coatings
- ii. 3.5 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for air-dried coatings
- iii. 3.5 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for extreme performance coatings
- iv. 3.0 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for all other coatings

Compliance with the coating VOC content shall be based on a calendar-month averaging period in accordance with section 3.2 of Regulations 6.31 and 7.59. (Regulation 6.31, section 3.1.3 and Regulation 7.59, section 3.1.3)

b. HAP

- i. The owner or operator shall limit the organic HAP emissions to the atmosphere to no more than 2.6 lb organic HAP per gallon of coating solids used during each 12-month compliance period. [40 CFR 63.3890(b)(1)] (See Comment 1)
- ii. 40 CFR Part 63, Subpart Mmmm applies to the following items that are used for surface coating of miscellaneous metal parts and products: [40 CFR 63.3882(b)]
 - 1) All coating operations as defined in §63.3981;
 - 2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
 - 3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
 - 4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

- iii. *Emission rate without add-on controls option.* The owner or operator shall demonstrate that, based on the coatings, thinners, and/or other additives, and cleaning material used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to 2.60 lb organic HAP per gallon of coating solids used, calculated as a rolling 12-month emission rate and determined on a monthly basis. The owner or operator must meet all the requirements of 63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option. [40 CFR 63.3891(b)](See Comment 1)
 - iv. *Work Practice Standards.* For any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, the owner or operator is not required to meet any work practice standards. [40 CFR 63.3893(a)]
 - v. *Operating Limits.* For any coating operation for which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits. [40 CFR 63.3892(a)]
 - vi. Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, as specified in 63.3891(a) and (b), must be in compliance with the applicable emission limit in 63.3890 (2.60 lb organic HAP per gallon of coating solids) at all times. [40 CFR 63.3900(a)(1)]
 - vii. The owner or operator must always operate and maintain the affected source, including all air pollution control and monitoring equipment you use for purposes of complying with Subpart Mmmm, according to the provisions in 63.6(e)(1)(i). [40 CFR 63.3900(b)]
- c. **PM/PM₁₀**
- i. For Emission Points E2 and E9, the owner or operator shall not allow the PM emissions to exceed 2.58 lb/hr from each paint booth. (Regulation 6.09, section 3.2)
 - ii. For Emission Points E5, E6, and E10, the owner or operator shall not allow the PM emissions to exceed 2.34 lb/hr from each paint booth. (Regulation 7.08, section 3.1.2)
 - iii. The owner or operator shall operate and maintain the PM Filter System for each paint booth at all times the paint booth is in operation. (Regulation 6.09, section 3.2 and 7.08, section 3.1.2)

d. **Opacity**

The owner or operator shall not allow or cause visible emissions to equal or exceed twenty percent (20%) opacity. (Regulation 6.09, section 3.1 and Regulation 7.08, section 3.1.1)

e. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulations 5.01 and 5.21) (See Comment 5)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1-2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal.

a. **VOC**

For Emission Points E2, E5, E6, E9, and E10, the owner or operator shall comply with the following record keeping requirements. (Regulation 6.31, section 6 and Regulation 7.59, section 6)

- i.
 - 1) The regulation and section number applicable to the affected facility for which the records are being maintained
 - 2) The application method and substrate type (metal, plastic, etc.),
 - 3) The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,
 - 4) The VOC content as applied in each coating and solvent,
 - 5) The date, or usage record period, for each application of coating and solvent,
 - 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month, and
 - 7) Oven temperature.

- ii. The VOC/HAP/PM emissions from the paint booths shall be calculated according to the following methodology, or another approved methodology:

$$\text{VOC} = \frac{(\text{material usage, gal})(\text{density, lb/gal})(\text{VOC content, \%})}{(2000, \text{lb/ton})}$$

$$\text{Single HAP} = \frac{(\text{material usage, gal})(\text{density, lb/gal})(\text{HAP content, \%})}{(2000, \text{lb/ton})}$$

$$\text{PM} = \frac{(\text{material usage, gal})(\text{density, lb/gal})(\text{solid content, \%})}{(1 - \text{transfer eff., \%})(1 - \text{filter eff., \%})(2000, \text{lb/ton})}$$

Assume the transfer efficiency for HVLP spray gun is 65% and the filter efficiency for dry filters is 90%.

b. **HAP**

Compliance Requirements for the Emission Rate without Add-on Controls Option

- i. The owner or operator must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3951 as specified in *Specific Condition S2.b.ii*. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890. [40 CFR 63.3950] (See Comment 3)
- ii. *Monitoring to Demonstrate Initial Compliance with Emission Limitation.* You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.3890, but is not required to meet the operating limits or work practice standards in §§63.3892 and 63.3893, respectively. You

must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of §63.3951. When calculating the organic HAP emission rate according to §63.3951, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed. [40 CFR 63.3951]

- iii. *Determine the mass fraction of organic HAP for each material.* The owner or operator shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.3941(a). [40 CFR 63.3951(a)]
- iv. *Determine the volume fraction of coating solids.* The owner or operator shall determine the volume fraction of coating solids (liter (gal) of coating solids per liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(b). [40 CFR 63.3951(b)]
- v. *Determine the density of each material.* The owner or operator shall determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965-02, "Standard Test Methods for Specific Gravity of Coating Powders" (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475-98 or ASTM Method D5965-02 test results and other such

information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of section §63.3951 (See Specific Condition S2.b.vii). [40 CFR 63.3951(c)]

- vi. *Determine the volume of each material used.* The owner or operator shall determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of section §63.951 (See SpecificConditionS2.b.vii). [40 CFR 63.3951(d)]
- vii. Calculate the kg organic HAP in the coatings used during the month using Equation 1A of §63.3951 as follows: [63.3951(e)(1)]

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Equation 1A})$$

Where:

- A = Total mass of organic HAP in the coatings used during the month, kg.
- Vol_{c,i} = Total volume of coating, i, used during the month, liters.
- D_{c,i} = Density of coating, i, kg coating per liter coating.
- W_{c,i} = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart PPPP of Part 63.
- m = Number of different coatings used during the month.

Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of §63.3951 as follows: [63.3951(e)(2)]

$$B = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Equation 1B})$$

Where:

- B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.
- Vol_{t,j} = Total volume of thinner and/or other additive, j, used

during the month, liters.

$D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of Part 63.

n = Number of different thinners and/or other additives used during the month.

Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of §63.3951 as follows: [63.3951(e)(3)]

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Equation 1C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

$Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$ = Density of cleaning material, k, kg per liter.

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- viii. *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. The owner or operator shall calculate the mass of organic HAP emissions using Equation 1 of §63.3951 as follows: [40 CFR 63.3951(e)]

$$H_e = A + B + C - R_w \quad (\text{Equation 1})$$

Where:

H_e = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B.

C = Total mass of organic HAP in the cleaning materials used

during the month, kg, as calculated in Equation 1C.

R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of §63.3951. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

- ix. The owner or operator shall determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of §63.3951 as follows: [40 CFR 63.3951(f)]

$$V_{st} = \sum_{i=1}^m (Vol_{c,i})(Vol_{s,i}) \quad (\text{Equation 2})$$

Where:

V_{st} = Total volume of coating solids used during the month, liters.
 $Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.
 $V_{s,i}$ = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).
 m = Number of coatings used during the month.

- x. The owner or operator shall calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of §63.3951 as follows. [40 CFR 63.3951(g)]

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (\text{Equation 3})$$

Where:

H_{yr} = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used
 H_e = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1.
 V_{st} = Total volume of coating solids used during month, y, liters, as calculated by Equation 2
 y = Identifier for months
 n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12)

- xii. *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of section §63.3951 must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §§63.3930 and 63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, determined according to the procedures in this section. [40 CFR 63.3951(h)]
- xiii. *Monitoring to Demonstrate Continuous Compliance with Emission Limitation.* To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890 (2.60 lb organic HAP per gallon of coating solids). A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. [40 CFR 63.3952(a)]
- xiv. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890 (2.60 lb organic HAP per gallon of coating solids), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(6). [40 CFR 63.3952(b)]
- xv. As part of each semi-annual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3890, determined according to §63.3951(a) through (g). [40 CFR 63.3952(c)]
- xvi. You must maintain records as specified in §63.3930 and §63.3931 (Specific Condition S2.b.xvi.) [40 CFR 63.3952(d)]
- xvii. The owner or operator shall maintain the following records:

- 1) The owner or operator must collect and keep records of the data and information specified in section §63.3930. Failure to collect and keep these records is a deviation from the applicable standard. [40 CFR 63.3930]
- 2) A copy of each notification and report that you submitted to comply with Subpart Mmmm, and the documentation supporting each notification and report. [40 CFR 63.3930(a)]
- 3) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [40 CFR 63.3930(b)]
- 4) For each compliance period, the records specified in paragraphs §63.3930 (c)(1) and (c)(3) as follows: [40 CFR 63.3930(c)]
 - (a) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used. [40 CFR 63.3930(c)(1)]
 - (b) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951. [40 CFR 63.3930(c)(3)]
- 5) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(d)]

- 6) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. [40 CFR 63.3930(e)]
 - 7) A record of the volume fraction of coating solids for each coating used during each compliance period. [40 CFR 63.3930(f)]
 - 8) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(g)]
 - 9) If you use an allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of §63.3930 as follows: [40 CFR 63.3930(h)]
 - (a) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265 , and 266 apply to the facility; and the date of each shipment. [40 CFR 63.3930(h)(1)]
 - (b) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.3951. [40 CFR 63.3930(h)(2)]
 - (c) The methodology used in accordance with §63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. [40 CFR 63.3930(h)(3)]
 - 10) The owner or operator shall keep records of the date, time, and duration of each deviation. [40 CFR 63.3930(j)]
- xvii. The owner or operator shall keep records in the form and time period as

the following:

- 1) The owner or operator must keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. [40 CFR 63.3931(a)]
 - 2) As specified in 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.3931(b)]
 - 3) The owner or operator must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off-site for the remaining 3 years. [40 CFR 63.3931(c)]
- xviii. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each HAP-containing material used at this plant. (Regulation 2.16, section 4.1.9)

c. PM/PM₁₀

- i. The owner or operator shall perform monthly visual inspections of each paint booth PM Filter System to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace filters as needed. (See Comment)
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if any filters were replaced.

d. Opacity

- i. For each PM emission point, The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with [40 CFR Part 60, Appendix A](#), within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all

visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

e. **TAC**

The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulation 5.01, section 3)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

The owner or operator shall report all periods of exceeding the coating VOC content emission standard during a reporting period. The semi-annual compliance report must include the date, duration (including the start and stop time) of each VOC exceedance, the quantity of excess VOC emissions, summary information on the cause or reason for exceeding the coating VOC content standard, corrective action taken to minimize the extent and duration of each VOC exceedance, and measures implemented to prevent reoccurrence of the situation that resulted in exceeding the coating VOC content standard. If there were no deviations from the coating VOC content standards that apply to you, the semi-annual compliance report must include a statement that there were no deviations from the coating VOC content standards during the reporting period.

b. **HAP**

i. *General Requirements.* The semi-annual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of §63.3920, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of section §63.3920 that is applicable to your affected source as follows: [40 CFR 63.3920(a)(3)]

- 1) Company name and address. [40 CFR 63.3920(a)(3)(i)]
- 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.3920(a)(3)(ii)]
- 3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of

the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63, 63.3920(a)(3)(iii)]

- 4) Identification of the compliance option or options specified in 63.3891 that you used on each coating operation during the reporting period. If you switched compliance options during the reporting period, you must report the beginning and ending dates for each option you used. [40 CFR 63.3920(a)(3)(iv)]
 - 5) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (63.3891(b) or (c)), the calculations results for each rolling 12-month organic HAP emission rate during the 6-month reporting period. [40 CFR 63.3920(a)(3)(v)]
- ii. *No deviations.* If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 that apply to you, the semi-annual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [40 CFR 63.3920(a)(4)]
 - iii. *Deviations:* Emission rate without add-on controls option. If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.3890, the semi-annual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of section 63.3920 as follows: [40 CFR 63.3920(a)(6)]
 - a) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.3890. [40 CFR 63.3920(a)(6)(i)]
 - b) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports). [40 CFR 63.3920(a)(6)(ii)]
 - c) A statement of the cause of each deviation. [40 CFR 63.3920(a)(6)(iii)]
 - d) Deviation means any instance in which an affected source subject to Subpart M, or an owner or operator of such a source: [40 CFR 63.3981]

- 1) Fails to meet any requirement or obligation established by this Subpart Mmmm including but not limited to, any emission limit or operating limit or work practice standard;
 - 2) Fails to meet any term or condition that is adopted to implement an applicable requirement in Subpart Mmmm and that is included in the operating permit for any affected source required to obtain such a permit; or
 - 3) Fails to meet any emission limit, or operating limit, or work practice standard in Subpart Mmmm during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by Subpart Mmmm.
- iv. *Inclusion with Title V report.* Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in 40 CFR Part 63, Subpart Mmmm in the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semi-annual compliance report pursuant to §63.3920 along with, or as part of, the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semi-annual compliance report includes all required information concerning deviations from any emission limitation in Subpart Mmmm, its submission will be deemed to satisfy any obligation to report the same deviations in the semi-annual monitoring report. However, submission of a semi-annual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority. [40 CFR 63.3920(a)(2)](See Comment 2)
- v. *Dates.* Unless the District has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semi-annual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of §63.3920. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63.3920(a)(1)](See Comment 2)
- c. **PM/PM₁₀**
- i. The owner or operator shall report all periods of failure to perform the monthly visual inspections of the PM Filter System for each paint booth during a reporting period. The semi-annual compliance report shall include the date, cause or reason for failure to perform the PM Filter System inspection, and measures implemented to prevent reoccurrence of the situation that resulted in failure to perform the inspection. If there were no periods of failure to perform the required monthly visual inspections

that apply to you, the semi-annual compliance report must include a statement that there were no periods of failure to perform the required monthly visual inspections for each paint booth during the reporting period.

- ii. The owner or operator shall report all periods of exceeding a PM emission standard during a reporting period. The semi-annual compliance report shall include the date, duration (including the start and stop time), quantity of excess PM emissions and the applicable PM emission standard, summary report that includes the cause or reason for exceeding a PM emission standard, corrective action taken to minimize the extent and duration of excess PM emissions, and measures implemented to prevent reoccurrence of the situation that resulted exceeding a PM emission standard. If there were no periods of exceeding a PM emission standard that applies to you, the semi-annual compliance report must include a statement that there were no periods of exceeding an applicable PM emission standard during the reporting period.

d. **Opacity**

- i. Any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests.
- ii. Any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed.
- iii. The number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed.
- iv. Identification of all periods of exceeding the opacity standard.
- v. Description of any corrective action taken for each exceedance of an opacity standard.

e. **TAC**

The owner or operator shall report semiannual to the District all exceedances of TAC standards. The semiannual compliance report shall include the date, type and amount of each exceedance. If there were no periods of exceeding any TAC de minimis emission levels, the semiannual compliance report must include a statement that there were no exceedances of any TAC de minimis emission levels. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded.

U2 Comments

1. 40 CFR Part 63, Subpart M MMM - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products* establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with 63.3891: Compliant Material Option, Emission Rate Without Add-on Controls Option, and Emission Rate With Add-on Controls Option. Industrial Container Services - KY, LLC identified the method of compliance as Emission Rate Without Add-on Controls Option in their initial Subpart M notification to the District. All coatings used at this plant are classified as general use coatings. For existing general use coating affected sources, the organic HAP emission limit is 2.60 lb organic HAP per gallon coating solids used during each 12-month compliance period.
2. In accordance with 40 CFR Part 63, Subpart M, section 63.3920(a)(1) and 63.3920(a)(1)(iv), Industrial Container Services, Inc. may submit their Subpart M semi-annual compliance reports on the same schedule as the Title V operating permit reporting requirements.
3. Industrial Container Services submitted the initial compliance demonstration for the initial compliance period on March 4, 2008 and were in compliance with 40 CFR 63 Subpart M requirements.
4. The potential hourly controlled PM emissions from each paint booth are below the applicable PM emission standards based on the maximum hourly coating usage, a coating density of 9.38 lb/gal, a maximum solids content of 35%, a 50% transfer efficiency, and a 90% control efficiency for each paint booth PM Filter System.
5. Industrial Container Services reported no Category 1 TAC emissions from this process and did not report any Category 2 TACs to the U.S. EPA 2006 Toxics Release Inventory (TRI).

Emission Unit U3: Miscellaneous metal parts surface coating operation. 16 gallon and 85 gallon steel drums. Two (2) paint booths with one (1) drying oven (E12).

U3 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3, & 4
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating	1, 2, 3, 4, 5, 6, & 7
40 CFR Part 63, Subpart A	General Provisions	63.1 through 63.16
40 CFR Part 63, Subpart MMMM	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	63.3880, 63.3881(a), 63.3882, 63.3890(b)(1), 63.3891(b), 63.3893(a), 63.3900(a)(1), 63.3901, 63.3910, 63.3920, 63.3930, 63.3931, 63.3950, 63.3951, 63.3952, 63.3980, 63.3981

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.01	General Provisions	1, 2, 3, & 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4, 5, & 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1, 2, 3, 4, & 5
5.23	Categories of Toxic Air Contaminants	1, 2, 3, 4, 5, & 6

U3 Emission Points					
Emission Point	Description	Applicable Regulation(s)	Allowable Emission/Equipment Standard	Control Device	Stack ID
E11	One (1) Paint Booth (16 gallon drums) Custom Built June 1, 1993	7.59	3.5 lb VOC/gal	C11	S11
		7.08	PM: 2.34 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart M MMM	See Specific Conditions		
E31	One (1) Paint Booth (Open head 85 gal overpack drums) Custom Built October 1, 2006	7.59	3.5 lb VOC/gal	C31	S31
		7.08	PM: 2.34 lb/hr Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR 63, Subpart M MMM	See Specific Conditions		

U3 Control Devices: Control devices C11 and C31 are fiberglass paint filter pads to control PM emissions.

U3 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

The owner or operator shall not allow or cause the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of the following:

- i. 4.3 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for clear coatings
- ii. 3.5 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for air-dried coatings
- iii. 3.5 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for extreme performance coatings
- iv. 3.0 lb of VOC/gal of coating, excluding water and exempt solvents, as applied for all other coatings

Compliance with the coating VOC content shall be based on a calendar-month averaging period in accordance with section 3.2 of Regulations 7.59. (Regulation 7.59, section 3.1.3)

b. HAP

- i. The owner or operator shall limit the organic HAP emissions to the atmosphere to no more than 2.6 lb organic HAP per gallon of coating solids used during each 12-month compliance period. [40 CFR 63.3890(b)(1)] (See Comment 1)
- ii. 40 CFR Part 63, Subpart Mmmm applies to the following items that are used for surface coating of miscellaneous metal parts and products: [40 CFR 63.3882(b)]
 - 1) All coating operations as defined in §63.3981;
 - 2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
 - 3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
 - 4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

- iii. *Emission rate without add-on controls option.* The owner or operator shall demonstrate that, based on the coatings, thinners, and/or other additives, and cleaning material used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to 2.60 lb organic HAP per gallon of coating solids used, calculated as a rolling 12-month emission rate and determined on a monthly basis. The owner or operator must meet all the requirements of 63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option. [40 CFR 63.3891(b)](See Comment 1)
- iv. *Work Practice Standards.* For any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, the owner or operator is not required to meet any work practice standards. [40 CFR 63.3893(a)]
- v. *Operating Limits.* For any coating operation for which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits. [40 CFR 63.3892(a)]
- vi. Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, as specified in 63.3891(a) and (b), must be in compliance with the applicable emission limit in 63.3890 (2.60 lb organic HAP per gallon of coating solids) at all times. [40 CFR 63.3900(a)(1)]
- vii. The owner or operator must always operate and maintain the affected source, including all air pollution control and monitoring equipment you use for purposes of complying with Subpart Mmmm, according to the provisions in 63.6(e)(1)(i). [40 CFR 63.3900(b)]

c. **PM/PM₁₀**

- i. For Emission Points E11 and E31, the owner or operator shall not allow the PM emissions to exceed 2.34 lb/hr from each paint booth. (Regulation 7.08, section 3.1.2)
- ii. The owner or operator shall operate and maintain the PM Filter System at all times the paint booths are in operation.

d. **Opacity**

The owner or operator shall not allow or cause visible emissions to equal or exceed twenty percent (20%) opacity. (Regulation 7.08, section 3.1.1)

e. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulations 5.01 and 5.21) (See Comment 9)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1-2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal.

a. **VOC**

For Emission Points E11 and E31, the owner or operator shall comply with the following record keeping requirements. (Regulation 7.59, section 6)

- i.
 - 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - 2) The application method and substrate type (metal, plastic, etc.),
 - 3) The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,
 - 4) The VOC content as applied in each coating and solvent,
 - 5) The date, or usage record period, for each application of coating and solvent,
 - 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month, and
 - 7) Oven temperature.
- ii. The VOC/HAP/PM emissions from the paint booths shall be calculated according to the following methodology or another approved methodology:

$$\text{VOC} = (\text{material usage, gal})(\text{density, lb/gal})(\text{VOC content, \%}) / (2000, \text{ lb/ton})$$

$$\text{Single HAP} = (\text{material usage, gal})(\text{density, lb/gal})(\text{HAP content, \%}) / (2000, \text{ lb/ton})$$

$$\text{PM} = (\text{material usage, gal})(\text{density, lb/gal})(\text{solid content, \%}) / ((1 - \text{transfer eff., \%})(1 - \text{filter eff., \%}) / (2000, \text{ lb/ton}))$$

Assume the transfer efficiency for HVLP spray gun is 65% and the filter efficiency for dry filters is 90%.

b. HAP

Compliance Requirements for the Emission Rate without Add-on Controls Option

- i. The owner or operator must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3951 as specified in *Specific Condition S2.b.ii*. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890 . [40 CFR 63.3950] (See Comment 3)
- ii. *Monitoring to Demonstrate Initial Compliance with Emission Limitation.* You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.3890, but is not required to meet the operating limits or work practice standards in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant

activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of §63.3951. When calculating the organic HAP emission rate according to §63.3951, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed. [40 CFR 63.3951]

- iii. *Determine the mass fraction of organic HAP for each material.* The owner or operator shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.3941(a). [40 CFR 63.3951(a)]
- iv. *Determine the volume fraction of coating solids.* The owner or operator shall determine the volume fraction of coating solids (liter (gal) of coating solids per liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(b). [40 CFR 63.3951(b)]
- v. *Determine the density of each material.* The owner or operator shall determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965- 02, "Standard Test Methods for Specific Gravity of Coating Powders" (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475-98 or ASTM Method D5965-02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of section §63.3951 (See Specific Condition S2.b.vii). [40 CFR 63.3951(c)]

- vi. *Determine the volume of each material used.* The owner or operator shall determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of section §63.951 (See SpecificConditionS2.b.vii). [40 CFR 63.3951(d)]
- vii. Calculate the kg organic HAP in the coatings used during the month using Equation 1A of §63.3951 as follows: [63.3951(e)(1)]

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Equation 1A})$$

Where:

- A = Total mass of organic HAP in the coatings used during the month, kg.
- Vol_{c,i} = Total volume of coating, i, used during the month, liters.
- D_{c,i} = Density of coating, i, kg coating per liter coating.
- W_{c,i} = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart P of Part 63.
- m = Number of different coatings used during the month.

Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of §63.3951 as follows: [63.3951(e)(2)]

$$B = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Equation 1B})$$

Where:

- B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.
- Vol_{t,j} = Total volume of thinner and/or other additive, j, used during the month, liters.
- D_{t,j} = Density of thinner and/or other additive, j, kg per liter.
- W_{t,j} = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart

PPPP of Part 63.
 n = Number of different thinners and/or other additives used during the month.

Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of §63.3951 as follows: [63.3951(e)(3)]

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Equation 1C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.
 $Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.
 $D_{s,k}$ = Density of cleaning material, k, kg per liter.
 $W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.
 p = Number of different cleaning materials used during the month.

- viii. *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. The owner or operator shall calculate the mass of organic HAP emissions using Equation 1 of §63.3951 as follows: [40 CFR 63.3951(e)]

$$H_e = A + B + C - R_w \quad (\text{Equation 1})$$

Where:

He = Total mass of organic HAP emissions during the month, kg.
 A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A.
 B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B.
 C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C.
 R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of §63.3951. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

- ix. The owner or operator shall determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of §63.3951 as follows: [40 CFR 63.3951(f)]

$$V_{st} = \sum_{i=1}^m (Vol_{c,i})(Vol_{s,i}) \quad (\text{Equation 2})$$

Where:

V_{st}	=	Total volume of coating solids used during the month, liters.
$Vol_{c,i}$	=	Total volume of coating, i, used during the month, liters.
$V_{s,i}$	=	Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).
m	=	Number of coatings used during the month.

- x. The owner or operator shall calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of §63.3951 as follows. [40 CFR 63.3951(g)]

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (\text{Equation 3})$$

Where:

H_{yr}	=	Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used
H_e	=	Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1.
V_{st}	=	Total volume of coating solids used during month, y, liters, as calculated by Equation 2
y	=	Identifier for months
n	=	Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12)

- xi. *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of section §63.3951 must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §§63.3930 and 63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which

you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, determined according to the procedures in this section. [40 CFR 63.3951(h)]

- xii. *Monitoring to Demonstrate Continuous Compliance with Emission Limitation.* To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890 (2.60 lb organic HAP per gallon of coating solids). A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. [40 CFR 63.3952(a)]
- xiii. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890 (2.60 lb organic HAP per gallon of coating solids), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(6). [40 CFR 63.3952(b)]
- xiv. As part of each semi-annual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3890, determined according to §63.3951(a) through (g). [40 CFR 63.3952(c)]
- xv. You must maintain records as specified in §63.3930 and §63.3931 (Specific Condition S2.b.xvi.) [40 CFR 63.3952(d)]
- xvi. The owner or operator shall maintain the following records:
 - 1) The owner or operator must collect and keep records of the data and information specified in section §63.3930. Failure to collect and keep these records is a deviation from the applicable standard. [40 CFR 63.3930]
 - 2) A copy of each notification and report that you submitted to comply with Subpart Mmmm, and the documentation supporting each notification and report. [40 CFR 63.3930(a)]

- 3) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [40 CFR 63.3930(b)]
- 4) For each compliance period, the records specified in paragraphs §63.3930 (c)(1) and (c)(3) as follows: [40 CFR 63.3930(c)]
 - (a) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used. [40 CFR 63.3930(c)(1)]
 - (b) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951. [40 CFR 63.3930(c)(3)]
- 5) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(d)]
- 6) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. [40 CFR 63.3930(e)]
- 7) A record of the volume fraction of coating solids for each coating used during each compliance period. [40 CFR 63.3930(f)]

- 8) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period.[40 CFR 63.3930(g)]
- 9) If you use an allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of §63.3930 as follows: [40 CFR 63.3930(h)]
 - (a) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265 , and 266 apply to the facility; and the date of each shipment. [40 CFR 63.3930(h)(1)]
 - (b) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.3951. [40 CFR 63.3930(h)(2)]
 - (c) The methodology used in accordance with §63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. [40 CFR 63.3930(h)(3)]
- 10) The owner or operator shall keep records of the date, time, and duration of each deviation. [40 CFR 63.3930(j)]
- xvii. The owner or operator shall keep records in the form and time period as the following:
 - 1) The owner or operator must keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. [40 CFR 63.3931(a)]
 - 2) As specified in 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance,

corrective action, report, or record. [40 CFR 63.3931(b)]

- 3) The owner or operator must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off-site for the remaining 3 years. [40 CFR 63.3931(c)]

xviii. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each HAP-containing material used at this plant. (Regulation 2.16, section 4.1.9)

c. **PM/PM₁₀**

- i. The owner or operator shall perform monthly visual inspections of each paint booth PM Filter System to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace filters as needed. (See Comment 4)
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if any filters were replaced.

d. **Opacity**

- i. For each PM emission point, The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- iii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with [40 CFR Part 60, Appendix A](#), within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

e. **TAC**

The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulation 5.01, section 3)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

a. VOC

The owner or operator shall report all periods of exceeding the coating VOC content standard during a reporting period. The semi-annual compliance report must include the date, duration (including the start and stop time) of each VOC exceedance, the quantity of excess VOC emissions, summary information on the cause or reason for exceeding the coating VOC content standard, corrective action taken to minimize the extent and duration of each VOC exceedance, and measures implemented to prevent reoccurrence of the situation that resulted in exceeding the coating VOC content standard. If there were no deviations from the coating VOC content standards that apply to you, the semi-annual compliance report must include a statement that there were no deviations from the coating VOC emission standard during the reporting period.

b. HAP

i. *General Requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of §63.3920, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of section §63.3920 that is applicable to your affected source as follows: [40 CFR 63.3920(a)(3)]

- 1) Company name and address. [40 CFR 63.3920(a)(3)(i)]
- 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.3920(a)(3)(ii)]
- 3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63.3920(a)(3)(iii)]
- 4) Identification of the compliance option or options specified in 63.3891 that you used on each coating operation during the reporting period. If you switched compliance options during the reporting period, you must report the beginning and ending dates

for each option you used. [40 CFR 63.3920(a)(3)(iv)]

- 5) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (63.3891(b) or (c), the calculations results for each rolling 12-month organic HAP emission rate during the 6-month reporting period. [40 CFR 63.3920(a)(3)(v)]
- ii. *No deviations.* If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [40 CFR 63.3920(a)(4)]
- iii. *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of section 63.3920 as follows: [40 CFR 63.3920(a)(6)]
 - a) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.3890. [40 CFR 63.3920(a)(6)(i)]
 - b) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports). [40 CFR 63.3920(a)(6)(ii)]
 - c) A statement of the cause of each deviation. [40 CFR 63.3920(a)(6)(iii)]
 - d) Deviation means any instance in which an affected source subject to Subpart Mmmm, or an owner or operator of such a source: [40 CFR 63.3981]
 - 1) Fails to meet any requirement or obligation established by this Subpart Mmmm including but not limited to, any emission limit or operating limit or work practice standard;
 - 2) Fails to meet any term or condition that is adopted to implement an applicable requirement in Subpart Mmmm and that is included in the operating permit for any affected

source required to obtain such a permit; or

- 3) Fails to meet any emission limit, or operating limit, or work practice standard in Subpart M MMM during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by Subpart M MMM.
- iv. *Inclusion with Title V report.* Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in 40 CFR Part 63, Subpart M MMM in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to §63.3920 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in Subpart M MMM, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority. [40 CFR 63.3920(a)(2)](See Comment 2)
 - v. *Dates.* Unless the District has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of §63.3920. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63.3920(a)(1)](See Comment 2)
- c. **PM/PM₁₀**
- The owner or operator shall report all periods of failure to perform the monthly visual inspections of the PM Filter System for each paint booth and all periods of exceeding a PM emission standard during a reporting period. The semi-annual compliance report shall include the date, cause or reason for failure to perform the PM Filter System inspection and/or the cause or reason for exceeding a PM emission standard, and measures implemented to prevent reoccurrence of the situation that resulted in failure to perform the inspection and/or exceeding a PM emission standard. If there were no periods of failure to perform the required monthly visual inspections and/or no periods of exceeding a PM emission standard that apply to you, the semiannual compliance report must include a statement that there were no periods of failure to perform the required monthly visual inspections and no periods of exceeding an applicable PM emission standard for each paint booth during the reporting period.
- d. **Opacity**

- i. Any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests.
 - ii. Any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed.
 - iii. The number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed.
 - iv. Identification of all periods of exceeding the opacity standard.
 - v. Description of any corrective action taken for each exceedance of an opacity standard specified in this permit.
- e. **TAC**

The owner or operator shall report semiannual to the District all exceedances of TAC standards. The semiannual compliance report shall include the date, type and amount of each exceedance. If there were no periods of exceeding any TAC de minimis emission levels, the semiannual compliance report must include a statement that there were no exceedances of any TAC de minimis emission levels. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded.

U3 Comments

1. 40 CFR Part 63, Subpart Mmmm - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products* establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with 63.3891: Compliant Material Option, Emission Rate Without Add-on Controls Option, and Emission Rate With Add-on Controls Option. Industrial Container Services - KY, LLC identified the method of compliance as Emission Rate Without Add-on Controls Option in their initial Subpart Mmmm notification to the District. All coatings used at this plant are classified as general use coatings. For existing general use coating affected sources, the organic HAP emission limit is 2.60 lb organic HAP per gallon coating solids used during each 12-month compliance period.
2. In accordance with 40 CFR Part 63, Subpart Mmmm, section 63.3920(a)(1) and 63.3920(a)(1)(iv), Industrial Container Services, Inc. may submit their Subpart Mmmm semi-annual compliance reports on the same schedule as the Title V operating permit reporting requirements.
3. Industrial Container Services submitted the initial compliance demonstration for the initial compliance period on March 4, 2008 and were in compliance with 40 CFR 63 Subpart Mmmm requirements.
4. The potential hourly controlled PM emissions from each paint booth are below the

applicable PM emission standards based on the maximum hourly coating usage, a coating density of 9.38 lb/gal, a maximum solids content of 35%, a 50% transfer efficiency, and a 90% control efficiency for each paint booth PM Filter System.

5. Construction permit 348-05-C (Emission Point E31) is being incorporated in the TV renewal permit.
6. Industrial Container Services is a major source for VOC. The uncontrolled potential VOC emissions from this construction project are 39.75 tpy. The potential VOC emissions are based on the surface coating of twenty 85 gallon steel drums (surface area of 3,798 in² per drum) per hour, a coating thickness of 6 mil, and a maximum coating VOC content of 3.38 lb/gal.
7. The PM emissions are 0.22 lbs/hr based on a maximum coating application rate of 2.664 gallons per hour, coating density of 8.248 lb/gal, solids content of 48.04%, 65% transfer efficiency, and a 94% control efficiency for the PM filter system. The PM emission limit of 2.34 lb/hr cannot be exceeded provided the PM filter system is properly maintained to achieve a 94% control efficiency. To assure ongoing compliance the source is required to monitor the performance of the paint booth filter system and conduct monthly visible emissions surveys.
8. The following form may be used for determining BAC and De minimus values:

http://www.louisvilleky.gov/NR/rdonlyres/121AAADA-9838-4057-ADFC-88CD95A14937/0/BAC_Worksheet.pdf
9. Industrial Container Services requested a limit of De minimus for all TACs.

Emission Unit U4: One (1) 25.2 MM Btu/hr natural gas fired boiler.

U4 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.07	Standard of Performance for Existing Indirect Heat Exchangers	1, 2, 3, & 4

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
N/A	N/A	N/A

U4 Emission Points					
Emission Point	Description	Applicable Regulation(s)	Allowable Emission/Equipment Standard	Control Device	Stack ID
E13	One (1) 25.2 MMBtu/hr Boiler Scotch North American January 1, 1975	6.07	PM: 0.45 lb/MMBtu SO ₂ : 1.0 lb/MMBtu Opacity: 20%	N/A	S13

U4 Control Devices: There are no control devices associated with Emission Unit U4.

U4 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. PM/PM₁₀**

The owner or operator shall not allow or cause to be discharged into the atmosphere, any gases which contain particulate matter in excess of 0.45 lb/MMBtu heat input capacity. (Regulation 6.07, section 3.1)

b. Opacity

No owner or operator subject to Regulation 6.07 shall cause the emission into the open air of particulate matter from any indirect heat exchanger which is greater than 20% opacity, except during periods of building a new fire, cleaning the fire box, or blowing soot for a period or periods aggregating not more than ten minutes in any 60 minutes which are less than 40% opacity. (Regulation 6.07, section 3.2)

c. SO₂

The owner or operator shall not cause to be discharged into the atmosphere, any gases which contain sulfur dioxide in excess of 1.0 lb/MMBtu heat input capacity. (Regulation 6.07, section 4.1)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal.

a. PM/PM₁₀

There are no compliance monitoring and record keeping requirements for this equipment. (See Comment 1)

b. Opacity

There are no compliance monitoring and record keeping requirements for this equipment. (See Comment 2)

c. SO₂

There are no compliance monitoring and record keeping requirements for this equipment. (See Comment 1)

S3. Reporting (Regulation 2.16, section 4.1.9.3)**a. PM/PM₁₀**

There are no semi-annual compliance reporting requirements for this equipment.

b. **Opacity**

There are no semi-annual compliance reporting requirements for this equipment.

c. **SO₂**

There are no semi-annual compliance reporting requirements for this equipment.

U4 Comments

1. The District has performed a one-time PM and SO₂ compliance demonstration for a 25.2 MMBtu/hr using AP-42 emission factors. The potential uncontrolled emissions of PM and SO₂ cannot exceed the applicable emission standards when combusting natural gas; therefore, no monitoring, record keeping, and reporting is required.
2. The District has determined that combusting natural gas will not cause an exceedance of the opacity standard. ICS is not required to perform periodic monitoring to demonstrate continuous compliance with the opacity standard.
3. Combustion of natural gas is de minimus per Regulation 5.01 Section 1.6.7.
4. The 112(j) Part 1 application was received by the District on 4/9/09, and the 112(j) Part 2 application was received by the District on 9/4/09.

Emission Unit U5: Five (5) Abrasive Blast Cleaning Units.

U5 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.09	Standard of Performance for Existing Process Operations	1, 2, & 3
7.08	Standard of Performance for New Process Operations	1, 2, & 3
40 CFR Part 64	Compliance Assurance Monitoring	64.1 through 64.10

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.01	General Provisions	1, 2, 3, & 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4, 5, & 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1, 2, 3, 4, & 5
5.23	Categories of Toxic Air Contaminants	1, 2, 3, 4, 5, & 6

U5 Emission Points					
Emission Point	Description	Applicable Regulation(s)	Allowable Emission/Equipment Standard	Control Device	Stack ID
E14a	One (1) Open Head Blaster #1 Pangborn June 1, 1973 126,000 lb/hr	6.09	PM: 46.75 lb/hr	C14a	S14a
			Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR Part 64	Pressure Drop: 0.5" and 8.0" inches w.c		
E14b	One (1) Open Head Blaster #2 Pangborn June 1, 1995 126,000 lb/hr	7.08	PM: 8.48 lb/hr	C14b	S14b
			Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR Part 64	Pressure Drop: 0.5" and 8.0" inches w.c		
E14e	One (1) Ring Blaster Wheelabrator June 24, 1997 30,000 lb/hr	7.08	PM: 19.24 lb/hr	C14e	S14e
			Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR Part 64	Pressure Drop: 0.5" and 8.0" inches w.c		
E14c	One (1) Tighthead Blaster Wheelabrator November 9, 1969 75,000 lb/hr	6.09	PM: 5.51 lb/hr	C8	S21
			Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR Part 64	Pressure Drop: 0.5" and 8.0" inches w.c		
E14f	One (1) Lid Blaster Wheelabrator 2009 19,200 lb/hr	7.08	PM: 14.59 lb/hr	C14f	S14f
			Opacity: 20%		
		5.01, 5.21, 5.23	See Specific Conditions		
		40 CFR Part 64	Pressure Drop: 0.5" and 8.0" inches w.c		

U5 Control Devices:

Control ID	Description	Performance Indicator	Stack ID
C14a	One (1) Baghouse Micro Air, Model RP8-3	Pressure Drop: 0.5" to 8.0" w.c.	S14a
C14b	One (1) Baghouse Micro Air, Model RP8-3	Pressure Drop: 0.5" to 8.0" w.c.	S14b
C14e	One (1) Baghouse AAF, Model Arrestall	Pressure Drop: 0.5" to 8.0" w.c.	S14e
C8	One (1) Baghouse Amerex, Model CD-32 (4x4)	Pressure Drop: 0.5" to 8.0" w.c.	S21
C14f	One (1) Baghouse Torit, Model DFT Z-8	Pressure Drop: 0.5" to 8.0" w.c.	S14f

U5 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. PM/PM₁₀**

- i. For Emission Points E14a, the owner or operator shall not allow or cause the PM emissions to exceed 46.75 lb/hr. (Regulation 6.09, section 3.2) (See Comment 1)
- ii. For Emission Point E14b, the owner or operator shall not allow or cause the PM emissions to exceed 33.59 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)
- iii. For Emission Point E14c, the owner or operator shall not allow or cause the PM emissions to exceed 41.94 lb/hr. (Regulation 6.09, section 3.2) (See Comment 1)
- iv. For Emission Point E14e, the owner or operator shall not allow or cause the PM emissions to exceed 19.24 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)
- v. For Emission Point E14f, the owner or operator shall not allow or cause the PM emissions to exceed 14.59 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1) (See Comment 5)
- vi. The owner or operator shall operate the control devices at all times an associated emission point is in operation. (Regulation 7.08, section 3.3)

b. Opacity

The owner or operator shall not allow or cause visible emissions to equal or exceed twenty percent (20%) opacity. (Regulation 6.09, section 3.1 and Regulation 7.08, section 3.1.1)

c. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulations 5.01 and 5.21) (See Comment 4)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal.

a. **PM/PM₁₀**

- i. The owner or operator shall perform a monthly visual inspection of the structural and mechanical integrity of each baghouse for signs of damage, air leakage, corrosion, or other equipment defects. The owner or operator shall repair and/or replace defective components as needed. All equipment defects shall be repaired within 15 working days following the date the equipment defect was first observed.
- ii. The owner or operator shall maintain monthly records of the results of each visual inspection. The records shall include the date and time of the inspection, the name of the person that conducted the inspection, and a brief summary of any equipment defects observed including a list of any components that were replaced or repaired.
- iii. The owner or operator shall monitor and maintain daily records that identify all periods of bypassing a baghouse while an associated PM Emission Point (abrasive blast cleaning unit) was in operation or a declaration entered into the records that each baghouse operated at all times an associated PM Emission Point was in operation for a given day. The records shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and Emission Point, the total lb/hr PM emissions during each bypass event, summary information on the cause or reason for each control device bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing a control device.
- iv. For control devices C14a, C14b, C14e, C8 and C14f, the owner or operator shall monitor and record the pressure drop at least once during each operating day to assure the pressure drop is maintain between 0.5” and 8.0” inches w.c. The differential pressure gauges shall be calibrated annually. [40 CFR 64.3(a)(2) and 64.7(a)]
- v. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- vi. The owner or operator shall monitor and maintain records of the hours of operation for each abrasive blast cleaning unit.
- vii. *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64, 64.7(b)]

- viii. *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 64.7(c)]
- ix. *Response to Excursions or Exceedances.* Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [40 CFR 64.7(d)(1)]
- x. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [40 CFR 64.7(d)(2)]
- xi. *Documentation of need for improved monitoring.* After approval of monitoring under Part 64, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly

notify the District and, if necessary, submit a proposed modification to the part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64(e)]

- xii. The PM emissions from the shot blast booths shall be calculated according to either of the following methodologies or another approved methodology:

$$E_{PM} = \frac{(EF_{PM})(TR_b/1000)(OH_b)}{(2000, lbs/ton)} (1 - Ef_c)$$

where

E_{PM} = PM emissions, tons
 EF_{PM} = 2.7 lb/1,000 lb abrasive, emission factor for shot blast
 TR_b = Maximum Throughput rate of the abrasive of each blast booth, lbs/hr

Pangbom #1 blast booth (E14a): $TR_b = 126,000$ lbs/hr
Pangbom #2 blast booth (E14b): $TR_b = 126,000$ lbs/hr
Ring Blaster Wheelabrator (E14e): $TR_b = 30,000$ lbs/hr
Tighthead Blaster Wheelabrator (E14c): $TR_b = 75,000$ lbs/hr
Lid Blaster Wheelabrator (E14f): $TR_b = 19,200$ lbs/hr

OH_b = Operation hours of each blast booth, hours
 Ef_c = Control efficiency of the baghouse, %

Or using the controlled EF_{PM}

$$E_{PM} = \frac{(EF_{PMc})(TR_b/1000)(OH_b)}{(2000, lbs/ton)}$$

where

E_{PM} = PM emissions, tons
 EF_{PMc} = Controlled PM 0.069 lb/1,000 lb abrasive, emission factor for shot blast
 TR_b = Maximum Throughput rate of the abrasive of each blast booth, lbs/hr

Pangbom #1 blast booth (E14a): $TR_b = 126,000$ lbs/hr
Pangbom #2 blast booth (E14b): $TR_b = 126,000$ lbs/hr
Ring Blaster Wheelabrator (E14e): $TR_b = 30,000$ lbs/hr
Tighthead Blaster Wheelabrator (E14c): $TR_b = 75,000$ lbs/hr
Lid Blaster Wheelabrator (E14f): $TR_b = 19,200$ lbs/hr

OH_b = Operation hours of each blast booth, hours

b. Opacity

- i. For Control Devices C14a, C14b, C14e, C8, and C14f, the owner or operator shall conduct a monthly one-minute visible emissions survey during normal process operation and daylight hours. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. For Emission Points E14a, E14b, E14e, E14c, and E14f, the owner or operator shall maintain monthly records of the results of all visible emissions surveys and Methods 9 tests performed. The records shall include the date of each VE survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.
- iii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

c. TAC

The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulation 5.01, section 3)

S4. Reporting (Regulation 2.16, section 4.1.9.3)

a. PM/PM₁₀

- i. The owner or operator shall submit semi-annual compliance reports that identifies all periods of bypassing a control device while an associated PM Emission Point (abrasive blast cleaning unit) was in operation during the reporting period. The semi-annual compliance report shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and Emission Point, the total lb/hr PM emissions during each bypass event, summary information on the cause or reason for each bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing a control

device. If there were no periods of bypassing a control device during a reporting period, the semi-annual compliance report must include a statement that there were no periods of bypassing a control device during the reporting period.

- ii. The semi-annual compliance report shall include summary information on the number, duration and cause (including unknown cause, if applicable) of excursions and exceedances, as applicable, and the corrective actions taken. [40 CFR 64.9(a)(2)(i)]
- iii. The semi-annual compliance report shall include a description of the actions taken to implement a QIP during the reporting period as specified in 64.8. Upon completion of the QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.. [40 CFR 64.9(a)(2)(iii)]

b. Opacity

- i. Any deviation from the requirement to perform the required monthly VE surveys or Method 9 tests.
- ii. Any deviation from the requirement to record the results of each monthly VE survey and Method 9 test performed.
- iii. The number, date, and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed.
- iv. Identification of all periods of exceeding the opacity standard.
- v. Description of any corrective action taken for each exceedance of an opacity standard specified in this permit.

c. TAC

The owner or operator shall report semiannual to the District all exceedances of TAC standards. The semiannual compliance report shall include the date, type and amount of each exceedance. If there were no periods of exceeding any TAC de minimis emission levels, the semiannual compliance report must include a statement that there were no exceedances of any TAC de minimis emission levels. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded.

U5 Comments

- 1. The potential uncontrolled PM emissions could exceed the applicable PM emission standard; therefore, the company is required to monitor the performance of the baghouses. The potential controlled PM emissions are below the applicable emission

standard based on the maximum capacity of each blast booth, AP-42 emission factors for steel shot, and using a control efficiency of 95% for each baghouse.

2. The following form may be used for determining BAC and De minimus values:

http://www.louisvilleky.gov/NR/rdonlyres/121AAADA-9838-4057-ADEC88CD95A14937/0/BAC_Worksheet.pdf

3. Construction permits 121-03-C, 82-06-C, 446-08-C and 447-08-C are being incorporated into this TV permit renewal.
4. Industrial Container Services requested a limit of De minimus for all TACs.
5. The emissions of manganese (1.5% by wgt in the steel shot) for emission point E14f could exceed the de minimis levels; therefore, Tier 4 (AirMod) air dispersion modeling was performed to determine compliance with the STAR program. The Tier 4 modeling shows a maximum annual concentration of 57.39 ug/m³ on industrial property and 10.189 ug/m³ on non-industrial property which results in a risk of 5.60 (<10) in one million on industrial property and 0.99 (<1) in one million on non-industrial property.

Emission Unit U6: One (1) Drum flushing operation using hydrochloric acid to remove rust from the steel drums.

U6 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
N/A	N/A	N/A

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.01	General Provisions	1, 2, 3, & 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4, 5, & 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1, 2, 3, 4, & 5
5.23	Categories of Toxic Air Contaminants	1, 2, 3, 4, 5, & 6

U6 Emission Points					
Emission Point	Description	Applicable Regulation	Allowable Emission/Equipment standard	Control Device	Stack ID
E15	One (1) Drum flushing operation Duall Division, Model 4335. 11/96	5.01, 5.21, 5.23	See Specific Conditions	C2 Packed-bed Scrubber	S15

U6 Control Devices:

Control ID	Description	Performance Indicator	Stack ID
C2	One (1) Packed-bed scrubber Duall Division, Model 4335	Inlet Water Flow Rate: ≥ 5.5 gpm	S15

U6 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulations 5.01 and 5.21) (See Comment 3)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1-2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal.

TAC

The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded. (Regulation 5.01, section 3)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

TAC

The owner or operator shall report semiannual to the District all exceedances of TAC standards. The semiannual compliance report shall include the date, type and amount of each exceedance. If there were no periods of exceeding any TAC de minimis emission levels, the semiannual compliance report must include a statement that there were no exceedances of any TAC de minimis emission levels. Emissions of Category 2 TACs not reported to the EPA for the 2006 Toxics Release Inventory are excluded.

U6 Comments

1. The following form may be used for determining BAC and De minimus values:

http://www.louisvilleky.gov/NR/rdonlyres/121AAADA-9838-4057-ADFC-88CD95A14937/0/BAC_Worksheet.pdf

2. Industrial Container Services requested a limit of De minimus for all TACs.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Alternative Operating Scenario

The source did not request any alternative operating scenarios.

Insignificant Activities

Equipment	Quantity	Basis for Exemption
Storage tanks - diesel or fuel oil (not for sale)	1	Regulation 2.02, 2.3.25
Internal Combustion Engine Fixed or Mobile	≤ 15	Regulation 2.02, 2.2
Brazing, soldering or welding	4	Regulation 2.02, 2.3.4
Soil or groundwater remediation (passive)	1	Regulation 2.02, 2.3.20
Operations Coating objects with grease	1	Regulation 2.02, 2.3.9.1
Emergency Relief Vents or ventilating systems	2 boiler vents	Regulation 2.02, 2.3.10
Heat-treating, soaking, case-hardening or surface conditioning of metal objects – using natural gas	2 NG-fired dryers	Regulation 2.02, 2.3.14
Washing or Drying Fabricated metal		Regulation 2.02, 2.3.15
Residential/Domestic Equipment	2	Regulation 2.02, 2.3.16
Cold Solvent Parts Cleaner with Secondary Reservoir	1	Regulation 2.02, 2.3.22
Plastics handling, grinding and regrind storage	1 PTE ≤ 1.4 tpy VOC	Regulation 2.16, 1.22.1.2
Bulk storage of non-VOC raw materials	1 AST for 50% NaOH	Regulation 2.16, 1.22.1.2
Storage of raw materials in drums and IBCs	≤ 24 drums non-vol process or WWTP chems; ≤ 60 drums paint or solvent; ≤ 10 IBCs or ≤ 12 drums oil or other maint products ≤ 14 drums haz waste	Regulation 2.16, 1.22.1.2
Wastewater treatment operations/activities	1 WWTP PTE ≤ 0.01 SO _x	Regulation 2.16, 1.22.1.2

Equipment	Quantity	Basis for Exemption
Elementary neutralization of corrosive wastes in containers (neutralize high-pH NaOH waste w H ₂ SO ₄)	≤10 drums D002 waste PTE ≤0.01 SO _x	Regulation 2.16, 1.22.1.2

- 1) Insignificant activities identified in District Regulation 2.02 Section 2, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 2.02 Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
- 3) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 4) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 5) The owner or operator elected to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions to be reported on the annual emission inventory.

**Industrial Container Services
Compliance Assurance Monitoring (CAM) Plan**

Company Name: Industrial Container Services, Inc.

Plant ID: 0002

Emission Unit: U5

Emission Point: E14a, E14b, E14c, E14e and E14f

Applicable Regulation: 7.08

PM Emission Limit: 33.59 lb/hr, 8.48 lb/hr, 5.51 lb/hr, 19.24 lb/hr and 14.59 lb/hr

Control Device: C14a, C14b, C8, C14e and C14f

Monitoring Approach: The key elements of the monitoring approach are presented in the below Table.

	Indicator 1	Indicator 2	Inspection Maintenance
Indicator [(64.6c(1)(i))]	Pressure Drop (ΔP) Across baghouse	Visible Emissions	Monthly maintenance and structural integrity inspection. Maintenance and inspection as recommended by manufacturer.
Measurement Approach [(64.6c(1)(ii))]	A pressure drop indicator shall be used to measure ΔP across the baghouse.	Visible emission surveys will be conducted on a monthly basis	
Indicator Range [(64.6(c)(2))]	An excursion for the baghouse is defined as any operating condition where the ΔP is less than 0.5 inches H ₂ O or greater than 8 inches H ₂ O.	An excursion for visible emissions is defined as the presence of any visible emissions greater than 20% opacity.	
Bypass [(64.6(a)(2))]	If the ΔP falls below the 0.5 inches H ₂ O, a possibility of a bypass is investigated.		
QIP Threshold [64.8]	Daily ΔP readings outside the performance indicator range for more than 3 times within a 3 month period	Visible emissions greater than 20% opacity for more than 3 times within a 3 month period	
Performance Criteria/data representativeness	ΔP : Minimum acceptable accuracy of pressure drop	Measurements are made at the exhaust stack	

<p>[64.6 (c)(1)(iii)]</p> <p>QA/QC Practices and Criteria [64.6 (b)(3)]</p> <p>Monitoring Frequency [64.6 (b)(4)]</p> <p>Data Collection Procedures [64.6 (b)(4)(iii)]</p>	<p>indicator per manufacturers specifications</p> <p>ΔP: Visual inspection and routine maintenance per manufacturer's recommendations. Inspect and maintain per Manufacturer's recommendations.</p> <p>ΔP monitored on a daily basis</p> <p>Recorded on a daily basis</p>	<p>The observer will be certified in Method 9 procedures.</p> <p>Visible Emissions Survey conducted on a monthly basis</p> <p>Recorded by observer on a monthly basis</p>	<p>Monthly Inspection</p> <p>Records are maintained to document monthly visual inspection and any maintenance performed.</p>
<p>Record Keeping and Reporting [64.9]</p>	<p>Excursion reporting and corrective actions taken</p> <p>Semi-annual Reports include:</p> <p>Investigation and corrective action report.</p> <p>Date, time, and duration of excursion.</p> <p>Cause of and corrective actions taken to eliminate excursion, and</p> <p>Measures taken to prevent re-occurrence</p> <p>A description of the actions taken to implement a QIP (as applicable)</p>	<p>Semi-annual Reports include:</p> <p>Investigation and corrective action report.</p> <p>Date, time, and duration of excursion.</p> <p>Cause of and corrective actions taken to eliminate excursion, and</p> <p>Measures taken to prevent re-occurrence</p> <p>A description of the actions taken to implement a QIP (as applicable)</p>	

Justification

Background: The pollutant specific emission source control devices at the facility consist of a baghouse to control PM emissions from the abrasive blast cleaning units (blast booths).

Rationale for Selection of Performance Indicators: Pressure drop and visible emissions were selected as performance indicators because, in combination, they are indicative of good operation and maintenance. When the system is operating properly, there will be little or no visible emissions. This is a good indicator because any increase in visible emissions indicates reduced

control device performance.

Rationale for Selection of Indicator Ranges: The selected range for the baghouse is 0.5” to 8” H₂O. These values are based on manufacturer’s recommended specifications for proper operation of the control devices. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence. All excursions will be documented.

Quality Improvement Plan (QIP) Threshold: The selected QIP threshold is three excursions within a 3 month period. If the QIP threshold is exceeded in a semi-annual period, a QIP will be developed and implemented.